

AMENDMENTS TO THE CLAIMS

1. (Original): A method for routing data packets to multiple partitions within a single end node, comprising:
 - assigning a range of local identification addresses (LIDs) to a channel adapter port in an end node; and
 - assigning bits within the local identification addresses to specify which of several partitions within the end node is being addressed.
2. (Original): The method of claim 1, wherein the bits are lower order bits.
3. (Original): The method according to claim 1, wherein the channel adapter port is connected to a system area network.
4. (Original): The method according to claim 1, wherein:
 - the network contains two raised to the N power end nodes, switches, and routers;
 - and
 - the number of bits in a local identification address equals N.
5. (Original): The method according to claim 2, wherein the lower order bits assigned to partitions are designated by a local identification mask control (LMC) field.
6. (Original): The method according to claim 5, wherein the local identification mask control can be any number of bits.
7. (Original): The method according to claim 5, wherein a number of lower order bits assigned to addressing within a port is up to two raised to the local identification mask control power.
8. (Original): The method according to claim 7, wherein the different local identification addresses of a port identify different partitions within the end node.

9. (Original): A computer program product in a computer readable medium for use in a data process system for routing data packets to multiple partitions within a single end node, the computer program product comprising:
- instructions for assigning a local identification address to a channel adapter port in an end node; and
 - instructions for assigning bits within the local identification address to a specific partition within the end node.
10. (Original): The computer program product of claim 9, wherein the bits are lower order bits.
11. (Original): The computer program product according to claim 9, further comprising instructions for connecting the channel adapter port to a system area network.
12. (Original): The computer program product according to claim 9, wherein:
- if the network contains two raised to the N power end nodes, switches, and routers;
 - the number of bits in a local identification address equals N.
13. (Original): The computer program product according to claim 10, wherein the lower order bits assigned to partitions are designated by a local identification mask control (LMC) field.
14. (Original): The computer program product according to claim 13, wherein the local identification mask control can be any number of bits.
15. (Original): The computer program product according to claim 13, wherein the number of lower order bits assigned to addressing within a port is up to two raised to the local identification mask control power.

16. (Original): The computer program product according to claim 15, wherein the different local identification addresses of a port identify different partitions within the end node.
17. (Original): A system for routing data packets to multiple partitions within a single end node, comprising:
means for assigning a local identification address (LID) to a channel adapter port in a network end node; and
means for assigning lower order bits within the local identification addresses to a specific partition within the end node.
18. (Original): The system according to claim 17, wherein the channel adapter port is connected to a system area network.
19. (Original): The method according to claim 17, wherein:
the network contains two raised to the N power end nodes, switches, and routers;
and
the number of bits in a local identification address equals N.
20. (Original): The system according to claim 17, wherein the lower order bits assigned to partitions are designated by a local identification mask control (LMC) field.
21. (Original): The method according to claim 20, wherein the LMC can be any number of bits.
22. (Original): The system according to claim 20, wherein the number of lower order bits assign to addressing within a port is up to two raised to the local identification mask control power.
23. (Original): The system according to claim 22, wherein the different local identifier addresses of a port identify different partitions within the end node.